



# **SPECIAL PUBLIC NOTICE**

**NUMBER 05-1**



**US ARMY CORPS OF ENGINEERS, SAN FRANCISCO DISTRICT  
US ENVIRONMENTAL PROTECTION AGENCY, REGION 9**

## **RELOCATION OF DREDGED MATERIAL DISPOSAL SITE SF-12 MOSS LANDING, CALIFORNIA**

**COMMENT PERIOD BEGINS MARCH 18, 2005  
COMMENT PERIOD ENDS APRIL 18, 2005**

---

### **Proposed Action**

The San Francisco District of the US Army Corps of Engineers (USACE) and Region 9 of the US Environmental Protection Agency (EPA) are proposing to relocate and clearly identify the location of the dredged material disposal site, known as "SF-12", located just offshore of Moss Landing, Monterey County, California.

### **Background**

Dredged material from Moss Landing Harbor, at the center of the Monterey Bay shoreline, has been hydraulically discharged just offshore of the Sandholdt Pier in approximately 40-50 feet (12-15 meters) of water since at least 1947 (see attached Figure). This is a generally dispersive location, and dredged material discharged here eventually flows down into the deeper reaches of Monterey Canyon either directly (via density flow during active dredging operations) or indirectly (during natural periodic, seasonal "flushing" events). This discharge location was formalized in 1973 as an ocean dredged material disposal site under the newly passed Marine Protection, Research, and Sanctuaries Act (MPRSA, also known as the Ocean Dumping Act). However, in 1978 the United States redefined the "baseline of the territorial sea" in the Monterey Bay area, moving it farther offshore, thereby resulting in the location of SF-12 coming under the jurisdiction of the Clean Water Act (CWA) instead of the MPRSA. Consequently, EPA and USACE jointly issued Public Notice (PN) 84-1 re-designating SF-12 (and an offshore site, "SF-14") as a CWA dredged material disposal site.

## **Need to Relocate SF-12**

At this time, EPA and USACE are proposing to clarify and slightly modify the location of the SF-12 dredged material disposal site. Three factors have underscored the need for this proposed action:

1. The specific location of SF-12 was somewhat ambiguous in the 1981 PN. That PN described SF-12 as "46 meters seaward of the Sandholdt (Ocean) Pier, and within 91 m of the head of Monterey Canyon, with center coordinates 36°48'05"N, 121°47'22"W, and an average depth of 12 m." However, the position coordinates and the narrative description did not remain consistently aligned over time. For example, the coordinates published in the 1981 PN used the "NAD 27" coordinate system. But a new coordinate system ("NAD 83") came into common usage soon thereafter. Users would then have to take care to either correct for the change or set their GPS units to the "old" NAD 27 coordinate system, because the same coordinates in the NAD 83 system would lead them to a location some 300 feet east of the originally-designated SF-12 site – almost on shore. Similarly, the narrative description did not remain accurate over time because the Sandholdt Pier was shortened by damage from the 1989 Loma Prieta earthquake, and further by severe storms in the 1990s. These inconsistencies led to confusion among agencies and site users as to the appropriate placement of the discharge pipe.

2. Under certain conditions suspended sediment plumes from active dredging and disposal operations have been reported to extend into the upper water column rather than immediately proceed as a density flow into the deeper waters of Monterey Canyon. The end of the discharge pipe is currently near the rim of the canyon head in water shallower than the tops of the submarine ridges that separate adjacent portions of the canyon head in this area. Sediment discharged at SF-12 eventually goes down canyon, but at the existing shallow discharge location it can sometimes also settle on the ridge tops and then be moved by wave action into the surf zone and onto the beach. Surface water plumes can also occur because the existing discharge point is often at or above the depth of the thermocline.<sup>1</sup> Plumes reaching the surface water from the dredged material discharge pipe at SF-12 have at times affected the seawater intakes serving the live aquariums of Moss Landing Marine Laboratories (MLML), the Monterey Bay Aquarium Research Institute (MBARI), and Phil's Restaurant. Surface plumes can also cause local ecological disturbances and can affect recreational use of the shoreline when suspended sediment plumes are visible and/or release hydrogen sulfide odors.

3. MLML has proposed to rebuild and enlarge the earthquake-damaged Sandholdt Pier (USACE permit number 254081S, issued on October 20, 2004) and construct an International Ocean Observatory there. The enlarged pier would extend over the existing SF-12 disposal site. Also, seawater intakes for the new Ocean Observatory would be located in the immediate vicinity. The presence of an enlarged pier and an Ocean

---

<sup>1</sup> The thermocline is a zone of rapidly changing water temperature and density that effectively separates plumes in deeper water from reaching the surface waters. At the head of Monterey Canyon, the thermocline typically occurs at 20-30 meters (J. Oliver, MLML, pers. comm., 3-2005).

Observatory would both make continued discharge of dredged material at the historic location of SF-12 problematic.

### **Proposed New Location of SF-12**

Based on these considerations, EPA and USACE are proposing to re-define the location of the SF-12 disposal site as follows and as shown on the attached Figure:

The center of the proposed new location for SF-12 is approximately 1100 feet (335 meters) west northwest of the MLML pier abutment. The site is an irregular quadrangle, measuring 55 meters (m) on the east (nearshore) side, 39 m on the west (offshore) side, 90 m on the north side and 115 m on the south side. The coordinates of the corners of this quadrangle are:

36° 48.124' N, 121° 47.524' W

36° 48.094' N, 121° 47.531' W

36° 48.103' N, 121° 47.595' W

36° 48.146' N, 121° 47.577' W

The proposed new location is approximately 900 feet (300 meters) farther offshore than the historic location. It is also in deeper waters ranging from 100-150 feet (30-45 meters) deep, as opposed to the original 40-50 feet (12-15 meters). This location is essentially in the same portion of the head of Monterey Canyon as the historic site. No new or different areas would be affected by discharged dredged material than has been the case under existing operations.

### **Effect of Relocating SF-12**

This action will reduce confusion by clarifying the official shape and position of the disposal site and specifically defining the coordinates of the area within which the end of any discharge pipe may be located.

Re-defining the location of SF-12 in this manner is also expected to result in operational benefits compared to the historic location, for both existing MLML and MBARI operations as well as for the proposed Ocean Observatory. Placing the dredge material discharge point deeper within the axis of the canyon and below the thermocline would eliminate or dramatically reduce the probability of suspended solids plumes affecting seawater intakes (at 50-55 foot depths) or sensors deployed from the pier by the Ocean Observatory. Also, the definition of an area rather than a point disposal site will facilitate pipe placement and relocation if temporary sediment accumulations occur at the end of the discharge pipe. At the same time, this action should not have any adverse effect on dredging operations carried out by either the USACE or Moss Landing Harbor District, using their existing or traditional equipment.

Finally, slightly relocating SF-12 as proposed is expected to have a net positive environmental benefit. This is because suspended solids plumes from discharged

dredged material will be much less likely to reach surface waters and negatively affect surface water quality in or near the Monterey Bay National Marine Sanctuary. Surface water plumes can adversely affect the feeding success of foraging fish and birds, by reducing light penetration. Visible plumes and odors in surface waters also create a negative, though temporary, impact on human recreational uses of the shoreline.

Note that by itself this action will not authorize any person or project to discharge any dredged material. In order to receive a Department of the Army Section 404 (Clean Water Act) permit to discharge dredged material at either the existing location or the relocated SF-12 site, there must first be a demonstration that the material is suitable for unconfined aquatic disposal, that the discharge will comply with relevant water quality standards and will be consistent with the state of California's applicable basin and Ocean plans, and that there is no less environmentally damaging practicable alternative to the proposed discharge. This and other existing aspects of dredged material management at Moss Landing and SF-12 are not affected by relocating the site. Dredged material testing and evaluation methods, and decisions about when and whether material from individual dredging projects is acceptable for disposal at SF-12, remain unchanged. No agency's authority or jurisdiction over dredging or dredged material disposal is affected by this action.

### **Consideration of Comments**

USACE and EPA are soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors. Comments are used to determine the need for a public hearing and to determine the overall public interest in the proposed activity.

### **Submission of Comments**

Interested parties may submit, in writing, any comments concerning this activity. Comments should include the project name and the number and the date of this Public Notice, and should be forwarded so as to reach USACE or EPA within the comment period specified on Page 1. Comments should be sent to Mr. Robert Lawrence at the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, 333 Market Street, San Francisco, California 94105-2197 or Mr. Brian Ross, US Environmental Protection Agency, Mail Code WTR-8, 75 Hawthorne Street, San Francisco, California 94105. Any person may also request, in writing, within the comment period of this Public Notice that a public hearing be held to consider this proposal. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting Mr. Robert Lawrence (USACE) at telephone number (415) 977-8020 or by E-mail at: [robert.j.lawrence@usace.army.mil](mailto:robert.j.lawrence@usace.army.mil), or Mr. Brian Ross (EPA) at telephone number (415) 972-3475 or by E-mail at: [ross.brian@epa.gov](mailto:ross.brian@epa.gov).